This listing of the claims replaces any and all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS

1 (Previously presented): A method for producing a transducer slider having at least one tapered edge, comprising:

(a) coating a substrate with a radiation-sensitive layer;

(b) imagewise exposing the radiation-sensitive layer to radiation according to an intensity pattern having a gradient conforming to said at least one tapered edge, said intensity pattern enabling specific levels of removal of portions of the radiation sensitive layer corresponding to the specific intensity pattern used;

(c) developing the image into the radiation-sensitive layer; and

(d) transferring the image into the substrate to form a transducer slider having a surface profile comprising said at least one tapered edge and a predetermined surface profile as provided by the specific intensity pattern used, wherein the predetermined surface profile contains no exposed sharp edge which might contact a disk surface when the transducer slider is in use.

2 (Previously presented): The method of claim 1, wherein the radiation-sensitive composition is spin coated on the substrate.

3 (Previously presented): The method of claim 2, wherein heat is applied to the radiation-sensitive layer after (a) and before (b).

4 (Previously presented): The method of claim 3, wherein the application of heat results in solvent evaporation from the radiation-sensitive layer.

5 (Original): The method of claim 1, wherein the radiation-sensitive layer is a positive resist.

6 (Original): The method of claim 1, wherein the radiation-sensitive layer is a low contrast resist.

7 (Original): The method of claim 1, wherein the radiation-sensitive layer has a thickness of about 1 to about 20 μm.

8 (Original): The method of claim 7, wherein the radiation-sensitive layer has a thickness of about 2 to about 10 μm.

9 (Currently amended): The method of claim 1 wherein the radiation is photonic.

10 (Original): The method of claim 1, wherein the radiation has an ultraviolet wavelength.

11 (Original): The method of claim 1, wherein the intensity pattern is provided using a grayscale mask.

12 (Original): The method of claim 11, wherein the patterned grayscale mask is electron-beam sensitive.

13 (Original): The method of claim 12, wherein the tapered edge corresponds to a portion of the patterned gray scale mask that has not been exposed to an electron beam.

14 (Previously presented): The method of claim 1, wherein a solvent is applied to the radiation-sensitive layer after (b) and before (c).

15 (Previously presented): The method of claim 14, wherein the image is developed into the exposed portion of the radiation-sensitive layer by the solvent during (c).

16 (Previously presented): The method of claim 1, wherein the substrate is exposed to an etchant during (c).

17 (Original): The method of claim 16, wherein the etchant comprises a gas.

18 (Original): The method of claim 17, wherein the gas comprises plasma.

19 (Original): The method of claim 18, wherein the plasma is argon based.

20 (Original): The method of claim 16, wherein the etchant comprises a liquid.

21 (Original): The method of claim 15, wherein the etchant is an isotropic etchant.

22 (Previously presented): The method of claim 1, wherein simultaneous removal of the patterned layer is carried out during (d).

23 (Original): The method of claim 1, wherein the substrate comprises a ceramic material.

24 (Original): The method of claim 23, wherein the ceramic material comprises carbide.

25 (Original): The method of claim 24, wherein the carbide is selected from the group consisting of aluminum carbide, silicon carbide, titanium carbide, boron carbide, geranium carbide, tungsten carbide, and mixed-metal carbide.

26 (Original): The method of claim 23, wherein the ceramic material comprises a nitride.

27 (Original): The method of claim 23, wherein the ceramic material comprises an oxide.

28-40 (Canceled)

41 (Previously presented): The method of claim 16, wherein the intensity pattern's relationship to the predetermined surface profile has been determined by using the equations t =

$(1-0.7\beta)D/K$ and $\alpha = \arctan K$, where t is the thickness of the radiation-sensitive layer at an edge of a mass of that layer, α is the taper angle of the radiation-sensitive layer, D is the etch depth resulting from exposure to the etchant, β is the ratio of taper length L of the etch profile over D, and K is the ratio of etch rate over substrate etch rate.